

Script

Issue 16

THE LOCOSCRIPT NEWSLETTER

Welcome to Issue 16 of *Script*. In this issue you'll notice something different – no News feature! This is because the news this month is the changes we are making to the product range, and we felt that these deserved their own articles.

Firstly it's sackcloth and ashes time! In the last issue of *Script* we had an article on how to create address labels. A number of readers were quick to point out its shortcomings, and on page 2 you will find a revised version of the program which we think will work better.

Next we turn to the Printer Support Pack; one of the three new products we have launched this month. The other products are new LocoFont packs, one for the 8000 built-in printer and one for suitable 24-pin printers: we'll be telling you about the changes to the LocoFont packs in our next issue.

In Issues 14 and 15 of *Script* we had a two-part article on CHARKIT showing you how to make an extra Character Set for a dot-matrix printer. In this issue we'll be showing you how to use CHARKIT to make a Character Set file for a printwheel. This will let you use a wide range of printwheels on an external daisy-wheel printer.

We also have an article on Identity Text. This is the short piece of text that you can inspect from the Disc Manager. Looking at the Identity Text is a quick way of seeing what is in the file if you've forgotten, so we show you how to enter your own descriptions so you can pick out your files more easily.

Then we turn to one of the most useful parts of a book: the index. In this article we'll show you how to set up your index entries and then use LocoFile and LocoMail to create the finished index.

Finally our PostScript feature is about a subject we know many of you are interested in – using LocoScript to help in researching family histories.

Contents

Correction 2

Revised version of the labels program

Printer support 3

The new Printer Support Pack

Printwheels 6

Using CHARKIT to support different printwheels

Identifying files 10

How to set and inspect the Identity Text of your files

Creating an index 13

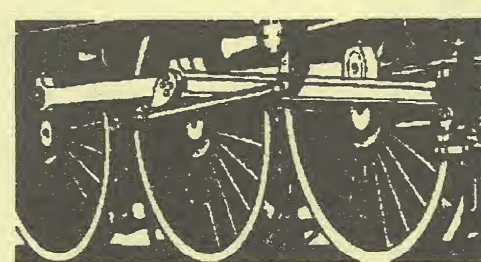
Creating an index with LocoFile and LocoMail

Letters 17

Extracts from our post bag

PostScript 20

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RH4 1YL

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Labels correction

If you tried to use the labels program published in Issue 15 of *Script*, you may have had some problems when producing labels from your own datafile. As some of you discovered, the problems happened when there were more filled items in the right hand label than in the corresponding left hand one. Where this occurred, the last lines were not tabbed across and the labels were printed incorrectly.

We're very sorry we didn't find this earlier. Unfortunately the above situation was never the case with the datafile that we tested the program on. The following revised version of the program avoids the problem.

```
(#Mail)␣
␣
spc = " " : null="" : tab="→"␣
cr="␣"␣
␣
action="( #Mail)␣
␣
out1=null:out2=null:out3=null:out4=null␣
out5=null:out6=null:out7=null:out8=null␣
␣
label="( #Mail)␣
y=1␣
s=name : % "# s <>null:<:out"&[y]&" = out"&[y]&" & s : y=[y+1] :>:"␣
s=room & spc & building : % "# s <>spc :<:out"&[y]&" = out"&[y]&" & s : y=[y+1] :>:"␣
s=street : % "# s <>null:<:out"&[y]&" = out"&[y]&" & s : y=[y+1] :>:"␣
s=village : % "# s <>null:<:out"&[y]&" = out"&[y]&" & s : y=[y+1] :>:"␣
s=town : % "# s <>null:<:out"&[y]&" = out"&[y]&" & s : y=[y+1] :>:"␣
s=county : % "# s <>null:<:out"&[y]&" = out"&[y]&" & s : y=[y+1] :>:"␣
s=postcode : % "# s <>null:<:out"&[y]&" = out"&[y]&" & s : y=[y+1] :>:"␣
s=country : % "# s <>null:<:out"&[y]&" = out"&[y]&" & s : y=[y+1] :>:"␣
out1 = out1 & tab␣
out2 = out2 & tab␣
out3 = out3 & tab␣
out4 = out4 & tab␣
out5 = out5 & tab␣
out6 = out6 & tab␣
out7 = out7 & tab␣
out8 = out8 & tab␣
␣
(=Mail)"␣
␣
%label(=Mail) (#Mail)␣
%label(=Mail) (#Mail)␣
␣
out1:cr␣
out2:cr␣
out3:cr␣
out4:cr␣
out5:cr␣
out6:cr␣
out7:cr␣
out8(=Mail)→
-----
␣
␣
␣
@ name % action␣
```


New support for printers

LocoScript's support for printers has changed. Instead of separate discs such as the Printwheels disc and the 24-Pin Printer Drivers disc, all LocoScript's printer files are available in one pack, the Printer Support Pack. This pack will include some new printer files, as well as the files that were available on the old discs.

For many people, the printers supplied with the PCWs are completely adequate. However you may prefer to use an external printer so you can produce better quality documents, or because you'd like a faster or quieter printer than your built-in printer. LocoScript supports a comprehensive range of printers, from sophisticated laser printers to relatively simple typewriters and basic dot-matrix printers. Previously the files you needed were supplied on a number of separate discs, but in order to simplify things, all the discs will now be supplied in one combined pack.

The Printer Support Pack

The Printer Support Pack has all the files that were previously available on the (Extra) Printers Drivers disc, the 24-Pin Printers Drivers disc and the 9512 Printwheels disc. These provide drivers for each printer, support for additional fonts, and support for all the printwheels available for the 9512 built-in printer. Also included are the CHARKIT and MKWHEEL programs used to create extra Character Set files if they are needed.

There are a number of new files which means the Printer Support Pack supports even more printers. Some of the files available before have been improved so it is possible to use more of the printer's own built-in fonts. Full details of the files and the changes are given in the booklets supplied with the pack.

Files for different printers

A range of general purpose Printer Drivers are supplied as standard with LocoScript 2, but you may find that using these drivers with your printer means that you can't produce proportionally spaced text or use the full

LocoScript Character Set even if your printer should be able to do this. So Locomotive have developed over a hundred Printer Driver files for a wide range of printers, from simple typewriters to sophisticated laser printers. In the list overleaf we show all the printers currently supported by LocoScript 2: those printers marked * have their own specific support files in the Printer Support Pack.

Previously the files needed to drive 24-pin printers were supplied on the separate 24-Pin Printers Drivers disc. The files are now included in the Printer Support Pack. With a suitable 24-pin printer (ie. a printer that is able to accept 'downloaded' characters) and these files you can print all of LocoScript's special characters. These characters range from accents and accented characters for printing in other languages, to scientific and mathematical symbols. A suitable 24-pin printer will let you print these in all the character pitches and in print styles like bold and italic.

Files for different typestyles

Most printers offer a number of 'fonts' or typestyles to print your documents. However in order to use these fonts, you must have the correct 'Character Set' files.

A Character Set specifies the range of characters available in a particular typestyle and also includes the characters' width information which is needed for proportional spacing. Some of the Printer Driver files include a Character Set but extra files may be used to support further typestyles. These additional Character Set files used to be supplied on the (Extra) Printers Drivers disc and the 24-Pin Printers Drivers disc; but they are now supplied in the Printer Support Pack.

There are a number of new Character Set files in the pack, many supporting alternative fonts or printwheels on certain printers for the first time. For example LocoScript can now support the Canon BJ-130E's built-in Letter Gothic font, and the US wheel on the Canon AP-500 daisy-wheel printer. The Character Set files for each printer can be seen in Appendix I of the booklet supplied with the pack.

Character Set files supporting extra timesteps on the 8000 built-in printer or a suitable 24-pin printers can be added with LocoFont and LocoFont 24. The new versions of these products will be described in the next issue of *Script*.

Different printwheels for the PCW9512

The Printer Support Pack also includes the files that you need to support all the different national language printwheels available for use on the PCW9512 built-in printer. These different language wheels are particularly useful for printing text with the correct accents for your chosen language. They also allow you to print in Greek and Russian as a file has been added to support the new Cyrillic wheel.

The CHARKIT and MKWHEEL programs

Although we now offer a more extensive range of Character Sets, you may want to use a font or wheel that isn't supported. So the Printer Support Pack also provides the CHARKIT and MKWHEEL programs which you can use to create any extra files you need yourself.

The CHARKIT program is used to create Character Set files for external printers. It is also the subject of a current series of *Script* articles; the third of which 'Using different printwheels' appears on page 6.

MKWHEEL allows you to make an extra Character Set for a 9512 printwheel. However it is extremely unlikely that you will need this program because the files for all the printwheels known to us are provided in the Printer Support Pack.

The Printer Support Pack is now available and costs £29.95. We have ceased the sale of the separate discs, although it may be still possible to buy the discs from LocoScript dealers.

The list below shows the full range of the printers supported by LocoScript at the time of publication. Those marked with a † can be used in download mode which enables them to produce all LocoScript's characters.

Simple Typewriters and older dot matrix printers

Anadex DP-500
Brother EP-44
Brother HR-1
Canon Typestar 7
Epson MX-80 *
Epson MX-100 *
IBM 6746
IBM 6747
Juki 2200 *
Juki 6000 *
Mannesmann Tally MT110
Mannesmann Tally MT180
Newbury Labs 8820
Oki Microline 80
Oki Microline 82A *
Oki Microline 83A *
Oki Microline 84A *
Olivetti ET 121
Olivetti Praxis 45D
Panasonic KX-E400
Panasonic KX-E500
Panasonic KX-E508
Panasonic KX-E8000
Qume Sprint 10
Sanyo PR3000
Seikosha GP-550A
Sharp MZ-1PO2 *
Silver Reed EX32
Silver Reed EX34
Silver Reed EX36
Silver Reed EX43/43N
Silver Reed EX44
Smith Corona L1000
Smith Corona TP-1
Xerox 610-CP *

Brother Typewriters

Brother AX-20 *
Brother AX-25 *
Brother AX-30 *
Brother AX-35 *
Brother CE-50 *
Brother CE-51 *
Brother CE-60 *
Brother CE-61 *
Brother CE-70 *
Brother CE-500 *
Brother CE-550 *
Brother CE-650 *
Brother EM-80 *
Brother EM-85 *
Brother EM-100 *
Brother EM-200 *
Brother EM-250 *
Brother EM-501 *
Brother EM-511 *
Brother EM-721 *
Brother EM-811 *
Brother EM-1000 *
Brother Executron 65 *

Daisy-wheel Printers

Brother HR-10
Brother HR-15
Brother HR-15XL
Brother HR-20
Brother HR-25
Brother HR-25XL
Brother HR-35
Brother HR-40
Busicom NX-90 *
C.Itoh A10-30 *
C.Itoh D10-40
C.Itoh F10-40 *
C.Itoh F10-55 *
C.Itoh FP 1500-25 *
Canon AP-110
Canon AP-160
Canon AP-250
Canon AP-360 *
Canon AP-400 *
Canon AP-510 *
Canon AP-600
Canon AP-610
Canon AP-700
Canon AP-800
Citizen Premiere 35
CosmoWriter 4000
Daisy M45-Q *
Dataproducts DP20
Diablo 630-API
Diablo 630-SPI
Dyneer DW-12
Dyneer DW-16 *
Dyneer DW-36
Epson DX-100
Facit 4565 *
Fujitsu SP830
Gakken 2000 *
Hermes H.18 *
IBM Wheelprinter *
Juki 6100 *
Juki 6200
Juki 6300
Juki 6500
Merlin MP1881 *
Micro Peripherals MP26
Micro Peripherals MP40
NEC 350 *
NEC 360 *
NEC 2000R *
NEC 2010 *
NEC 2030 *
NEC 3510 *
NEC 3515
NEC 3530 *
NEC 3550 *
NEC 8810 *
NEC 8815
NEC 8830 *
NEC 8850 *
Olivetti ET 109
Olympia Carrera *
Olympia ESW 103 *
Olympia ESW 1000C
Olympia ESW 3000 *
Olympia Mastertype I
Olympia RO *
Panasonic KX-P3131
Panasonic KX-P3131U
Panasonic KX-P3151U

Quendata EX80 *
 Quendata 1120 DWP *
 Qume Letterpro+ *
 Qume Letterpro 20 *
 Qume Sprint 5 *
 Qume Sprint 9 *
 Qume Sprint 11 *
 Remstar 202 *
 Remstar 205 *
 Remstar 401 *
 Ricoh RP 1600
 Sanyo PR5200
 Schneider SD15 *
 Silver Reed EX66/66FD
 Silver Reed EX66IF
 Silver Reed EX200
 Silver Reed EX300
 Silver Reed EXP400
 Silver Reed EXP420
 Silver Reed EXP500 *
 Silver Reed EXP550 *
 Silver Reed EXP600
 Silver Reed EXP770
 Silver Reed EXP800
 Silver Reed EZ30
 Silver Reed EZ50
 Smith Corona EL4000 *
 Star Micronics PowerType *
 Tandy DWP-210 *
 Tandy DWP-220 *
 Tandy DWP-230 *
 Tandy DWP-410 *
 Tandy DWP-510 *
 Triumph-Adler OM 2000
 Triumph-Adler TRD-7020
 Uchida DWX-305 *

9 Pin Dot Matrix Printers

Admate SP80LQ *
 Amstrad DMP 2000
 Amstrad DMP 2160
 Amstrad DMP 3000
 Amstrad DMP 3160
 Amstrad DMP 3250di
 Amstrad DMP 4000
 Amstrad FX9600T *
 Binder 1550 *
 Binder 8510 *
 Brother M-1009 *
 Brother M-1109 *
 Brother M-1209 *
 Brother M-1409 *
 Brother M-1509 *
 Brother M-1709 *
 Brother M-1818
 Brother M-1918
 C.Itoh C210
 C.Itoh C310 XP
 C.Itoh C315 XP
 C.Itoh C715 Q *
 C.Itoh CI-3500 *
 C.Itoh Super F+
 C.Itoh 1550S/SC+NLQ *
 C.Itoh 8510S/SC+NLQ *
 Canon A-60/F *
 Canon A-60/G *
 Canon PJ-1080A *
 Canon PW-1080A *
 Centronics GLP
 Centronics H80 *
 Centronics H156 *
 Citizen LSP-10
 Citizen MSP-10E
 Citizen MSP-15E
 Citizen MSP-20
 Citizen MSP-25
 Citizen 120-D

Daisy M2001 *
 Daisy M3001
 Daisy M8001
 Diconix 150 *
 Diconix 150 Plus *
 Epson EX-800 *
 Epson EX-1000 *
 Epson FX-80
 Epson FX-85
 Epson FX-86E *
 Epson FX-100
 Epson FX-105
 Epson FX-185
 Epson FX-286E *
 Epson FX-800 *
 Epson FX-850 *
 Epson FX-1000 *
 Epson FX-1050 *
 Epson GX-80 *
 Epson JX-80
 Epson LX-80 *
 Epson LX-86 *
 Epson LX-400 *
 Epson LX-800 *
 Epson LX-850 *
 Epson MX80 Type III *
 Epson RX-80 *
 Epson RX-100 *
 Facit B3150 *
 Facit B3350 *
 Fujitsu DX2100 *
 Fujitsu DX2200 *
 IBM Graphics Printer *
 IBM Proprinter *
 IBM Quiet Printer *
 Integrex Colourjet 132 *
 Juki 5510
 Juki 5520
 Kaga KP-810 *
 Logitech FT5001 *
 Logitech FT7000 *
 Mannesmann Tally MT80+
 Mannesmann Tally MT81 *
 Mannesmann Tally MT85 *
 Mannesmann Tally MT86 *
 Mannesmann Tally MT91 *
 Mannesmann Tally MT460
 Mannesmann Tally MT490
 Memotech DMX80
 Micro Peripherals MP135
 Micro Peripherals MP165
 Micro Peripherals MP200
 Micro Peripherals MP201
 Micro Peripherals MP480
 Micro Peripherals MP700
 NEC P2 series *
 NEC P3 series *
 Oki Microline 180 *
 Oki Microline 190 *
 Oki Microline 192 *
 Oki Microline 193 *
 Oki Microline 194 *
 Oki Microline 290 *
 Oki Microline 292 *
 Oki Microline 293 *
 Oki Microline 294 *
 Oki Microline 320 *
 Oki Microline 321 *
 Olivetti DM 100
 Olivetti DM 100-S
 Olivetti DM 105-S
 Olympia NP80 *
 Olympia NP136 *
 Panasonic KX-P1080 *
 Panasonic KX-P1081 *
 Panasonic KX-P1082 *
 Panasonic KX-P1083 *

Panasonic KX-P1180 *
 Panasonic KX-P1592 *
 Panasonic KX-P1592U *
 Panasonic KX-P1595 *
 Panasonic KX-P1695 *
 Samleco DX-85
 Samleco DX-86
 Samleco DX-135
 Samleco DX-136
 Seikosha BP-5420FA
 Seikosha MP-1300AI
 Seikosha MP-5300AI
 Seikosha SP-1200AI *
 Shinwa CP-80 *
 Star Micronics Delta-15 *
 Star Micronics FR-10 *
 Star Micronics FR-15 *
 Star Micronics Gemini-10X *
 Star Micronics LC-10 *
 Star Micronics LC-15 *
 Star Micronics ND-10 *
 Star Micronics ND-15 *
 Star Micronics NL-10
 Star Micronics NR-10 *
 Star Micronics NR-15 *
 Star Micronics NX-15
 Star Micronics SR-10 *
 Star Micronics SR-15 *
 Tandy DMP-106 *
 Tandy DMP-430 *
 Toshiba P321 *
 Toshiba P341e *
 Toshiba P351 *
 Toshiba P351C *
 Walters Printmate 350 *
 Walters SX *
 Walters WM-100
 Walters WM-2000 *
 Walters WM-4000 *

24 Pin Dot Matrix Printers

Amstrad LQ 3500 *†
 Amstrad LQ 3500di *†
 Amstrad LQ 5000di *†
 Brother M-1224L *
 Brother M-1724L *†
 Brother 2024L *†
 C.Itoh C715 F *†
 Citizen HQP-40 *†
 Citizen HQP-45 *†
 Citizen Prodott 24 *†
 Citizen Swift 24 *†
 Epson LQ-400 *†
 Epson LQ-500 *†
 Epson LQ-550 *†
 Epson LQ-800 *†
 Epson LQ-850 *†
 Epson LQ-860 *†
 Epson LQ-1000 *†
 Epson LQ-1050 *†
 Epson LQ-1060 *†
 Epson LQ-1500 *†
 Epson LQ-2500 *†
 Epson LQ-2550 *†
 Facit B3450 *
 Fujitsu DL2400 *
 IBM Proprinter X24 *
 IBM Proprinter XL24 *
 IBM Quiet Writer 3 *
 Juki 7100 *†
 NEC P2 Plus *†
 NEC P5 *†
 NEC P6 *†
 NEC P6 Plus *†
 NEC P7 *†
 NEC P7 Plus *†
 NEC P2200 *†

Oki Microline 390 *†
 Oki Microline 391 *†
 Panasonic KX-P1124 *†
 Panasonic KX-P1540 *†
 Panasonic KX-P1624 *†
 Schneider SD24 *†
 Seikosha SL-80AI *†
 Seikosha SL-130AI *†
 Star Micronics LC24-10 *†
 Star Micronics LC24-15 *†
 Star Micronics NB-15 *
 Star Micronics NB24-10 *†
 Star Micronics NB24-15 *†
 Star Micronics XB24-10 *†
 Star Micronics XB24-15 *†

Ink-Jet/Bubble-Jet Printers

Canon BJ-10E *
 Canon BJ-130 *
 Canon BJ-130E *
 Epson SQ-850 *†
 Epson SQ-2000 *†
 Epson SQ-2500 *†
 Epson SQ-2550 *†
 HP DeskJet *
 HP DeskJet Plus *
 HP PaintJet *
 HP QuietJet *
 HP QuietJet Plus *

Laser Printers

Brother HL-8 *
 Brother HL-8E *
 C.Itoh LIPS 10
 Canon LBP-4 *
 Canon LBP-8
 Canon LBP-8II *
 Canon LBP-8III *
 Centronics PP-8 *
 Citizen Overture 110
 Daisy M7001 *
 Epson GQ-3500 *
 Epson GQ-5000 *†
 HP LaserJet *
 HP LaserJet II *
 HP LaserJet IIP *
 HP LaserJet Plus *
 HP LaserJet 500+*
 Kyocera F-1000 *
 Kyocera F-1010 *
 Kyocera F-2010 *
 Mannesmann Tally MT910 *
 Oki Laserline 6 *
 Panasonic KX-P4450 *
 Qume Crystalprint II *
 Sharp JX-9300 *
 Star Micronics LP-8 *

Miscellaneous Printers

Brother TWINRITER 5
 C.Itoh TPX-80
 Epson HI-80 *

Using different printwheels

When you use a daisy-wheel printer, the characters that you can print out are normally limited to the characters on the standard ASCII printwheel for this printer. If you want to print other characters you can fit a different printwheel in your printer, but this means that you must also change the Character Set LocoScript is using, so LocoScript knows what characters are available. If we don't supply the Character Set file you want, then you have to make it yourself.

In Issues 14 and 15 of *Script* we showed you how to define a Character Set for a dot-matrix printer using the CHARKIT program. In this article we'll be showing you how to use CHARKIT to define a Character Set for a daisy-wheel printer.

When you use a daisy-wheel printer with LocoScript, the characters you can print depend on the printwheel you are using. Generally the characters on the wheel supplied with your printer won't include many of LocoScript's special characters and symbols, so you won't be able to print these – LocoScript will simply leave a space so you can put them in by hand.

However there are a large number of different printwheels available and you might find a wheel for your printer that has the characters you want. Similarly you might want to print in a different language, or you may want to use a PS wheel. Because the new wheel has different

characters or characters in different positions, you can't print with it until you have 'told' LocoScript about the characters on this wheel. You do this by selecting a different Character Set file, one with the information about the wheel you want to use.

All the files you need for the wheels for the PCW9512 built-in printer are supplied with the Printer Support Pack (see the box below). But for daisy-wheel printers used as an alternative to the PCW's built-in printer, the wide variety of different printwheels available means it is difficult for LocoScript to support any more than the standard wheel supplied with each printer, although the new

The special case of PCW9512 Printwheels

Listed below are the files provided in the Printer Support Pack.

File	Character Set		
PCW9512.#CA	Fr. Canadian	PCW9512.#NL	Netherlands
PCW9512.#CD	Swiss German	PCW9512.#PF	Portuguese Nova
PCW9512.#CN	Fr.Can. (Nakajima)	PCW9512.#PP	Port. NovaPS
PCW9512.#CF	Swiss French	PCW9512.#PR	Port. Rarotype
PCW9512.#CY	Russian	PCW9512.#S	Swedish/Finnish
PCW9512.#D	German	PCW9512.#SF	Swiss French
PCW9512.#DK	Danish	PCW9512.#T	Turkish
PCW9512.#E	Spanish	PCW9512.#US	USA (also wheels marked with Character Style only)
PCW9512.#F	French	Printwheels for the PCW9512 are special and the files needed for the available national printwheels are provided in the Printer Support Pack (see the list above). In the very unlikely case that you have a printwheel for the 9512 printer that isn't in the above list, you can set up the Character Set with a special program supplied on Printer Support Disc 1. The program is called MKWHEEL. Note that this program is only for printwheels for the PCW9512 built-in printer: you can't use MKWHEEL to define a Character Set for any other printwheel.	
PCW9512.#GB	England		
PCW9512.#GR	Greek Latin		
PCW9512.#I	Italian		
PCW9512.#IC	Icelandic		
PCW9512.#L	Latin		
PCW9512.#LA	Latin American		
PCW9512.#N	Norwegian		

Printer Support Pack does include a few extra files (see the article on page 3). If you want to use an unsupported wheel on an external daisy-wheel printer, you have to set up the necessary Character Set file yourself.

You do this using the CHARKIT program. We introduced CHARKIT in our previous articles in Issues 14 and 15 of *Script*. Although these articles dealt with creating a Character Set file for a dot-matrix printer, the principles involved in creating a file for a daisy-wheel printer are basically the same.

Throughout the article we will be using the Gakken 2000 daisy-wheel printer as our example. To demonstrate the way a Character Set is created we will talk about the steps you would have to carry out in order to use a French fixed pitch wheel on this printer instead of the UK wheel that the Gakken driver, GAKKEN.PRI, supports.

Printwheels

Printwheels are small discs with the characters arranged around the outside on separate spokes. This is why they are called 'Daisy-wheels' – someone thought the wheel looked like a daisy with a lot of petals! The number of 'petals' varies according to the type of wheel and the printer it works on; Qume-type printers use a 96 petal wheel, while Juki-type printers use a 100 petal wheel. The Gakken 2000 is similar to a Qume and will happily use Qume wheels.

Printwheels come in 'families'. This means that there are a range of wheels for particular printers that have the same characters and codes; the only differences between them is the style and font. So you can use the various wheels to produce text in a different typestyle, but because the actual characters on the wheels are the same, you don't usually need to change the Character Set file you are using.

There are two kinds of printwheels; fixed pitch wheels where all the characters are approximately the same size, and proportionally spaced wheels where the width depends on the actual characters, eg. the 'm' character is wider and the 'i' is narrower than they would be on a fixed pitch wheel. The different widths of the characters is actually enough to affect the balance of the wheel and so the characters are arranged differently on PS wheels. As a result, PS wheels need their own Character Set files.

Characters and Codes

Like the dot-matrix printer dealt with in the previous articles, all actions in preparing and printing documents on a daisy-wheel printer involve using codes to represent characters and actions. As we've said before, these codes are simply numbers which tell the printer which character to print.

When using a daisy-wheel printer you have to remember that LocoScript associates codes with characters but your printer can only work in terms of selecting a particular petal; it cannot 'see' the character. So you have to send the right code to the printer in order to print the right character.

Most printer manufacturers use the ASCII standard codes for the letters A to Z, numbers and common punctuation that appear on all printwheels. However, the ASCII range only provides codes for 94 characters, so there are special codes for the remaining characters on a printwheel. The codes used for the characters on these 'extra' petals are usually short escape sequences. (We explained what these were in the articles in Issues 14 and 15.)

Different printers use different escape sequences for the extra petals – even if they use the same printwheels. For example, the same printwheels can be used on both Diablo-type and Qume-type printers, but while the Diablo printers use the escape sequences ESC Y and ESC Z, Qume-type printers use ESC Space and ESC /. However LocoScript uses the codes 'P1' and 'P2' to represent the extra petals and what 'P1' and 'P2' actually represent is defined in the appropriate Printer Driver file. This means you may be able to use the same Character Set with both printers because the different Printer Driver files ensure that the correct sequences are used.

Printwheel tables

The information needed about the characters on the wheel and which petal they are on is held as a 'Printwheel table'. Each wheel needs its own table of information because printwheels have different selections and arrangements of characters depending on which family the printwheel belongs to, and whether it is a fixed pitch or a PS wheel.

The DAISY.BAS program

Samples assuming different PS widths

Printer code	'&40'	'&40'	@	@@@@@	@@@@@	@@@@@	@@@@@	@@@@@
	'&41'	A	A	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Code for the	'&42'	B	B	BBBBB	BBBBB	BBBBB	BBBBB	BBBBB
Character Definition file	'&43'	C	C	CCCCC	CCCCC	CCCCC	CCCCC	CCCCC
	'&44'	D	D	DDDDD	DDDDD	DDDDD	DDDDD	DDDDD
	'&45'	E	E	EEEEEE	EEEEEE	EEEEEE	EEEEEE	EEEEEE
	'&46'	F	F	FFFFFF	FFFFFF	FFFFFF	FFFFFF	FFFFFF
Character produced	'&47'	G	G	GGGGG	GGGGG	GGGGG	GGGGG	GGGGG

You may find this information in your printer's manual and indeed the Gakken printer manual does give the full details of its French wheel. If you are very lucky you might even have tables for a whole variety of printwheels. But if you haven't got the information you want, you can generate it yourself by using the DAISY.BAS program which is stored in group 0 of the Printer Support Disc 1. This program produces a table of codes used by your printer and the characters on the printwheel you are using.

The box above shows an example from the list produced. The first column shows the value of the code that the printer uses to access the character, the second column shows this code in the form recommended for use in the Character Definition file. The remaining columns show you the character produced by the code (at different spacings). You can refer back to this list when you are defining your Character Definition file to find out the codes you need.

PS wheels

If you want to use a PS wheel you will also need to know the character widths. The place to look for this information is in the documentation supplied with your PS wheel. There could also be a table in your printer's manual which gives you the widths you need, or ones that are likely to be approximately correct.

However character widths are rarely documented completely, because you don't usually need them to operate the printer. If you are given the widths, but not the units they are measured in, you should assume that they are 1/60ths of an inch because this is the commonest definition. If there is no mention of PS widths at all, you'll have to find them out yourself.

If you have a Diablo-630, Qume or Juki 6100 compatible printer, this is easy. The BASIC program which we talked about in the last

Substitutions

When you read the CHARKIT instructions you will find that there are several references to "substitutions". Basically there are a number of characters in the LocoScript character set which are the same shape or very similar to each other. For example an upper-case alpha is identical to an ordinary upper-case A. Therefore to print a capital alpha, the code for an capital A may be "substituted" for the code for the capital alpha in the Character Definition file. Substitutions are important when using printwheels because the number of characters you can actually print is fairly small.

Substitutions fall into two categories; straightforward substitutions like the one above, or characters produced by printing one character on top of another like the slashed zero, which is produced from an ordinary 0 and the / character. In this case the code for both characters is given.

Both these examples are 'Standard Substitutions' because LocoScript will do them automatically without you having to do anything. The Standard Substitutions deal with all the common substitutions, so you will rarely need to worry about them when creating your Character Definition file. But if you do want to make an extra substitution, all you have to do is find out the code of the relevant petal. Then enter this code into the Character Definition file twice, once associated with the real character and once associated with the character you want to substitute.

section also produces samples of the character printed assuming PS widths of 7, 6, 5, 4 and 3 1/60ths of an inch. So you can choose the one that looks correctly spaced and then use this width in the Character Definition file.

You'll also need to define character widths for things like the space character and the numbers. The best solution is to make them all 5/60ths of an inch so they match 12 pitch spaces. You should also set this width as the default PS width, so it'll be used when a specific PS width isn't given, and for the =, < and > characters. As these characters reserve space for the page numbers when they are set up, it is easier if they are the same size as the numbers.

Preparing the Character Definition file

As in the dot-matrix case, the Character Definition file is essentially a simple text file. It is created by editing a similar file, then turning it into ASCII format. Printer Support disc 1 has a number of templates for Character Definition files and you pick one to suit the printer you are using. For the Gakken you would pick a template in the PETAL 96 group, because the Gakken uses a 96 petal wheel. From this template you create a new document named after your new wheel.

The Character Definition file is split into two sections: the Header section and the File Body. The Header section holds information like the name of the printer and the printwheel. You also put the default PS width information in the Header section. This is explained in more detail in the first CHARKIT article in Issue 14.

The File Body holds the precise details of the characters on the printwheel, so this is where you have to insert the codes for the characters on your wheel. The lines look like this:

Code	"Character-name"	PS-width
(Selecting petal)		(If necessary)

You only have to put in the PS widths if you are using a PS wheel.

In the box we show you a part of the File Body for a Gakken 2000 printer and how you would change it to use the French printwheel. The article in Issue 15 dealt with changing the File Body, so you should refer back to this article for more information if you need it.

Changing the File Body

One of the differences between the Gakken's standard ASCII Character Definition file and the French Character Definition file is the character accessed by code !'40'. On the ASCII wheel this character is the "AT" symbol, ie. @. On the French wheel this is replaced by a lower case a grave - a, which has the LocoScript name "GRAVE + A LOWER". So all you have to do is find !'40' in the Character Definition file and change the name next to it from "AT" to "GRAVE + A LOWER". Then when you use the French wheel in your printer, the right character will be printed.

Change this to	; ASCII CODES &40 - &47
"GRAVE + A LOWER"	!'&40' "AT"
	A "A UPPER"
	B "B UPPER"
	C "C UPPER"
	D "D UPPER"
	E "E UPPER"
	F "F UPPER"
	G "G UPPER"

Simply repeat this for all the characters that are different, for example changing the name next to '&3C' from "LESS THAN" to "OPEN SQUARE BRACKET". The full list of characters that must be changed is given in the Gakken manual.

Running CHARKIT

After you have turned your new Character Definition file into an ASCII file you are ready to run the CHARKIT program. If CHARKIT finds any errors in your file it tells you where they are. Then you can go back to the LocoScript document and correct them before making a new ASCII version and re-running the program.

When the program has processed the whole file you will find that you have a new file called GAKKEN.#FR (or whatever you decided to call your file) in your directory. You can now install this new Character Set file on your Start-of-day disc, just like you would any other Character Set from the Printer Support Pack. Once you have done this you will be able to select this file in your documents and then print them out using the new wheel in your printer.

Identifying files

An often overlooked feature of LocoScript is the Identity Text – a short description of each of your documents, datafiles and even LocoScript system files, which you can read from the Disc Manager. In this article we show how to examine the Identity Text of any file and how to change it on your own files.

For every LocoScript file, be it a document, a datafile or one of LocoScript's own program files, there are three lines of thirty characters that can be used to describe its use. For your own files you can choose almost any description, but for the LocoScript system files this Identity Text gives you some useful technical information.

The Identity Text can be a great time saver in sorting out which file you need – the more so the more files you have. Rather than try to remember whether the document SMITH.001 or SMITH.002 held your quotation to Mr Smith for a new central heating system or waste time starting to edit the wrong files, you can look briefly at the Identity Texts.

Setting the Identity Text

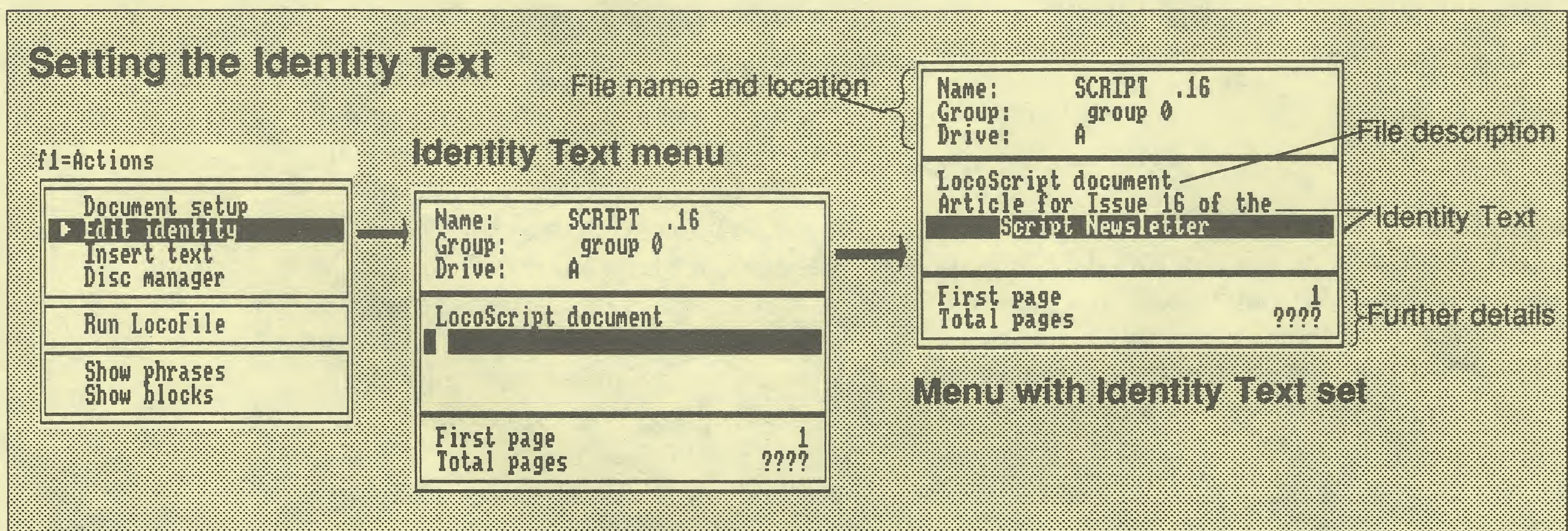
You can change the Identity Text directly from the Disc Management Screen, from the LocoScript editor or from LocoFile when you are working on a datafile. We'll see shortly how to do this from the Disc Manager, but the best practice is to set up the Identity Text when you first create the document.

The first step is to create the document in the normal way. If you have a system of Templates set up, your document will as usual be a copy of the appropriate Template.

From the normal editing screen press **F1** to call up the Actions menu as shown in the box below.

Then either press **↓** or **E** to move the cursor to **Edit identity**, and **ENTER** to confirm the action. You are then presented with a display of information about the file. The part we are interested in are the three lines of Identity Text, but you can also change the page numbers at the bottom if you wish.

If you had set the Identity Text in the Template, the new document will be initialised with the same Identity Text. This feature is useful as you can set up standard texts in each Template and only change a part in each document's Identity Text. If you didn't set the Template's Identity Text, or are not using any Templates, the three lines of Identity Text will be blank.



You can now move the cursor about the Identity Text and set up any description you want, but note that editing the text isn't quite the same as when editing a document. For a start, the way spaces are treated is different from the normal editing rules – it is as if all the lines are initially filled with spaces. So if you move to the middle of the line before typing anything, the text you type will appear in the middle rather than snapping back to the left hand edge. There's also no need to press **RETURN** at the end of each line, you can simply move the cursor to next line. However the words don't wrap down to the next line automatically; LocoScript just beeps when you get to the end of a line.

You should also note that the range of characters you can type is more restricted than for documents – you can't type any Cyrillic characters or many of the maths symbols for example. The full details of which characters are available is given on page 274 of the LocoScript 2 User Guide (or page 333 of the 9512 User Instructions). You cannot type any word processing codes either.

When you have typed the text you require, press **ENTER** to return to editing, type the contents of the document, and then save it on disc. The Identity Text you have set will be remembered along with the document.

LocoFile datafiles

You can set the Identity Text when you create a datafile in much the same way as for a document. When you are creating the datafile's card layout press **F1** and you'll find Edit identity the first option in the Actions menu. Pressing **ENTER** again gives you a display of information about the file very similar to the one for documents, but note that for datafiles the two lines of further information are for information only – you cannot edit them.

Name:	ADDRESS .DAT
Group:	group 0
Drive:	M
LocoFile datafile	
Addresses for Squash Club	
0 records in file	
6 % of file free	

You can also edit the Identity Text from the normal LocoFile screen, but after pressing **F1** the shortcut to type here is EY as more than one menu item starts with E.

Inspecting Identity Text

When you want to inspect the Identity Text of a file, you can do this from the Disc Manager. Move the File Cursor to the file you are interested in and press **F5** to bring up the Document menu.

We want to Inspect document, so simply press **ENTER** to select this option. LocoScript will once again present you with the Identity Text.

f5=Document

Inspect document
Set first pages
Set total pages

Note that the File description now shows its real value – a different message is displayed for each different type of file. For a LocoScript 2 document it reads "LocoScript Document", but if the document had been created by LocoScript '1' it would read "LocoScript 1 Document", or if it were a LocoFile Datafile it would read "LocoFile Datafile".

Name:	LETTER .HDP
Group:	TEMPLATE
Drive:	A
LocoScript 1 document	
Template	
for letters on headed A4 paper	
no special continuation sheets	

If now you want to change the Identity Text, you can – just as if you had called up this display from within the document. Indeed, it's a good idea to use this feature to set Identity Texts in your existing files (and particularly, Templates). This will make your use of the Identity Text much more complete, and consequently more helpful as you add more files.

LocoScript's special files

If you inspect one of the LocoScript files on your Start-up discs, you'll see file descriptions like "System dictionary" or "Printer PRI file". You'll also find that we've set up the Identity Text for these files already.

The Identity Text will include Locomotive's copyright message. Also included is more information about that particular file. The extra information will vary from one type of system file to another. Perhaps the most useful information is that included in Printer Driver files. This information includes the date they were created and is of particular help if you have different copies of the same Driver and need to find the latest version.

Name:	24LC24	.PRI
Group:	group 0	
Drive:	A	
Printer PRI file		
Star LC24-10, 24-pin.		
Locomotive Software 7 Dec 88		

LocoScript is also clever enough to recognise when you are using system files that don't match – for example if you take a printer file from an old Master disc and try to use it with an up-to-date system. In such cases LocoScript gives the old file the special description "Incompatible LocoScript file".

Name:	DMP	.PRI
Group:	SYSTEM	
Drive:	B	
Incompatible LocoScript file		
Amstrad DMP3000		
Copyright 1987		
Locomotive Software Ltd.		

Unlike the Identity Text of your own files, you cannot alter the Identity Text of LocoScript system files. But if you use, say, the LocoChar program to add special characters to a Character Set file, or the LocoKey program to make a keyboard file with a personalised layout, the program will encourage you to set up the Identity Text for the files you create.

Keeping an Index of your discs

If you're careful to keep all your Identity Texts up to date, they provide the best way to scan the contents of a disc quickly.

If you do use Identity Texts methodically, there's a special program called Super Lindex that could be helpful. This provides a listing of all your files on disc together with all their Identity Texts in the form of a LocoScript document. This means you can easily see exactly what you have on your discs and you can print out the information for reference purposes. Super Lindex also provides the information in a way that can be easily inserted into a LocoFile datafile should you wish to store the information in that way.

The program is available from a company called Festival Software. They are a completely voluntary enterprise and all profits go to the Bradford Diocesan Board of Finance for the development of urban churches. The current cost of the program is £14.95.

We talked about Super Lindex in some detail in Issue 12 of *Script*, but you can get more information by writing directly to Festival Software Services, 470 Leeds Road, Thackley, Bradford, BD10 9AA.

Creating an index

An index is an important part of a book or a long document. However setting up an index can be difficult especially if you haven't done it before. So in this article we will be showing you how using LocoFile and LocoMail can make things easier for you.

An index is often the most useful item in a book, because it allows the reader to find the subject they are interested in with the minimum of looking. For this reason great care is needed when compiling the index to make sure that the right subjects are covered, that they are arranged in the right order and all the page numbers are given – there's nothing quite so infuriating as an incorrect index!

When you look something up in an index you'll find that each entry has two or three pieces of information – a Topic, followed by a Sub-topic if there is one and then the page references. Topics are the main points covered in the document. If there is a lot of information about a particular topic in your document, then the different sections will be Sub-topics. The page references are the numbers of all the pages where the subject is mentioned and they can either be single numbers or a range of numbers like 2-5, for example.

Example of a finished index

Grant enlarger, 26
Hot wax, 16-17
Photography
 commissioned, 157, 21
 use of, in computer graphics, 183
 use of, in graphic design work, 46-7
Spare setting, 30
Text, 21, 44
 coloured, 26
 number of characters in, 44
 positioning, 29

This is what your index will look like if you follow the instructions given in this article

In the box below you can see an example of an index. We created this index by storing each Topic and Sub-topic (when applicable) with the relevant page number on an individual record in a LocoFile datafile: then using LocoFile's indexing to sort the entries alphabetically. Finally we merged the datafile with a special LocoMail program to produce the index document. In the rest of this article we shall be explaining this method in more detail, so you can follow the same route in order to create your own index.

Collecting the information

The very first thing you have to do is to pick out the things you'll want in your index. While working on your document you might like to mark these things in some way so you'll be able to find them easily later. For example you could reverse the text on the screen by using (+ReV) and (-ReV) codes, or you could print your document and make notes on the print-out. To keep a record of the things you have marked it is a good idea to add a page at the end of each chapter or section of your document and type in all the items from that chapter in the order that they appear. Then you can go straight to this page when you want to look at the index information.

After you have decided what you want in your index you need to store the information in a LocoFile datafile. Putting the information straight into a datafile seems attractive because you can just call up the datafile onto the screen whenever you find something you want to index and type it in. But if you do this you will have to go back through the records later to add all the page numbers, and you might find it difficult to remember which entry was which. Also, as explained later, you need to add the

information to the datafile in page number order – so putting it straight into the datafile means that it's harder to change your mind later about what to index and what order you put it into the datafile.

So the way we advise is to put all the information into a LocoScript document first. This makes it easy to check your information and add the relevant page numbers before you insert the information into the datafile. It also means that you can easily put the index information into the datafile in the 'page number' order. This is important later because if records have the same Topic and Sub-topic, then LocoFile will sort them into record number order.

The document must be laid out as a LocoMail datafile or 'data document' so it will be suitable for insertion into a datafile. The layout of a data document is explained in the next section.

Note: It is very important to get the page numbers right. After you put them into the data document, you should always double check them before going any further. This will save you having to make corrections later.

The data document

If you have followed our suggestion to put your index entries on a separate page at the end of each chapter, you can create the data document by copying these pages then pasting them into a new document in the right order. Call the document something like "INDEX.DOC", so you'll be able to pick it out easily later. Now all you have to do is go through this new document and edit the information.

At the very beginning of the document you need a 'Record Pattern'. This part of the data document defines how the rest of the document is laid out, which is important when inserting text into a datafile. The Record Pattern we are using here looks like this:

Topic, Subtopic\$page ⏏

The information in the rest of the document then follows this pattern. Between your Topic and the Sub-topic you should put a comma, but you separate the Sub-topic from the page number with a \$. The page reference can either be a single number or you can show that the subject is covered in a range of consecutive pages by using a dash, eg. 25-29. Finally you need a page break to show where you finish one particular entry and go on to the next. When you have entered all your information, type a page break to end the document. You can see an example of what your data document should look like in the box opposite.

If you have a Topic, like Text in the example, which has no Sub-topic, you should type in ! as the Sub-topic. If you just leave a blank, then the entries for Text would come after all the other Text entries with Sub-topics in the index, which isn't what you want. Typing ! as the Sub-topic avoids this as ! is sorted first when the items are arranged alphabetically. (Don't worry; the printing process will suppress the ! so it won't be produced in the final index.)

If all the entries are different it doesn't matter about the order your index information is inserted. For example you can have the entry for Text before the one for Spare setting

The data document

The Record Pattern

Entries laid out according to the Record Pattern

Topic, Subtopic\$page ⏏

Photography, commissioned\$157⏏

Hot wax,!\$16-17⏏

Photography, use of, in computer graphics\$183⏏

Photography, commissioned\$21⏏

Text,!\$21⏏

Text, coloured\$26⏏

Grant enlarger,!\$26⏏

Text, positioning\$29⏏

Spare setting,!\$30⏏

Text,!\$44⏏

Text, number of characters in\$44⏏

Photography, use of, in graphic design work\$46-7⏏

because they will be sorted alphabetically after you have inserted the data document into the datafile. But if any of the entries have the same Topic and Sub-topic, then they have to be entered in page number order, for example the entry for Text on page 21 must come before the entry for Text on page 44. The reason for this is because LocoFile sorts the records only by Topic and the Sub-topic. If these are both the same then the entries will appear in record number order. This is why we suggest that you type in your entries in the order that they appear in your document, because then record number order will correspond to page number order.

Setting up the datafile

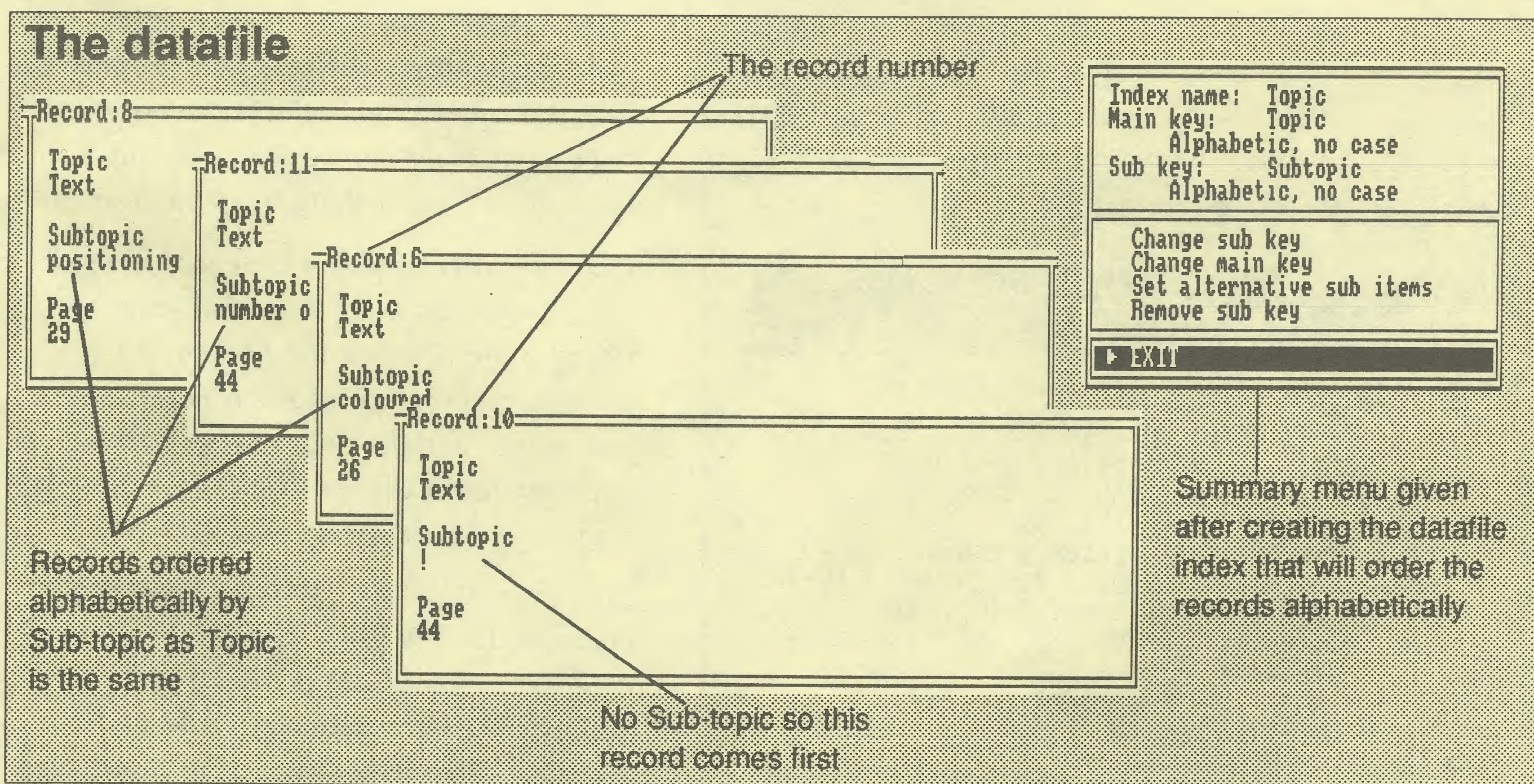
You set up the datafile to include a Topic item, a Sub-topic item and a Page Number item like the ones in the box below. After you have done this you are ready to insert INDEX.DOC.

You do this in the following way. From your datafile call up the **[F1]** Actions menu. Then move the cursor to the Insert data option and press **[ENTER]**. You are then shown the Disc Manager to select the file you want to insert. Move the cursor to your data document and press **[ENTER]**. A menu will then appear so you can check if you've picked the right file, if you have press **[ENTER]** again. Your data document will now be inserted into the datafile.

You can insert data into your datafile as many times as you want. This means you can create a number of data documents, the first containing the indexing information from chapter 1, the second containing the information from chapter 2 and so on. But if you do decide to create your index in stages like this, you should still insert the data documents into the datafile in the correct order, so the page number order still corresponds to record number order.

When you have entered all your information you will have series of records, each with a Topic, a Sub-topic (or a ! if there isn't a Sub-topic) and a page reference. As you want your index to be arranged alphabetically you must now set up a 'Topic' index with Topic as the Main key and Subtopic as the Sub key to sort the records into the order you want.

Press **[F1]** to call up the Actions menu and select Datafile set-up. Select the item you want as the Main key item, which is the Topic item in this case, and then press **[F2]**. Select Create new index from the menu that appears and press **[ENTER]**. You will be shown a menu listing all the items on the card with the Topic item already selected for you. You don't want to change this, so just press **[ENTER]**. Now you are shown a menu to select the ordering, with Alphabetic already selected for you. Press **[ENTER]**.



The LocoMail Master Document

```
(+Mail)␣
:= "Topic"␣
␣
setbold="(+Bold)"␣
clrhold="(-Bold)"␣
␣
comma="," : indent=" " : empty="!" : cr="␣"
␣
oldTopic=""␣
oldSubtopic=""␣
␣
loop=""␣
#Topic<>oldTopic:<:cr:setbold:Topic:clrhold:oldSubtopic=empty:>␣
#Subtopic<>oldSubtopic:<:cr:indent:Subtopic:>␣
comma:page␣
oldTopic=Topic␣
oldSubtopic=Subtopic␣
#+␣
␣
/loop␣Topic␣
```

The name of the index used

Codes to make the Topic bold

Instruction that inserts Topic

Instruction that inserts Subtopic

Instruction to insert page numbers separated by commas

A menu with a summary of the details you have set up so far will now appear and the index that you have set up will be called 'Topic' after your Main key item. But you also want to arrange the Sub-topics alphabetically, so the next stage is to set up the Sub-topic item as the Sub key. Move the cursor to Add sub key and press **ENTER**. The Sub-topic item may already be selected because it is the next item on the record, but if it isn't, simply select it by moving the cursor to it and pressing **LB**. Press **ENTER** and you'll find Alphabetic is again selected for you automatically. Press **ENTER** again and a new summary menu will appear (shown in the box on the previous page) showing you what you have done. Finish by moving the cursor to EXIT (eg. by pressing **EXIT**) and press **ENTER**.

When this index is selected your records will be arranged alphabetically with all the Topics and their Sub-topics in the right order, as shown earlier and you are ready to move on to the next stage of creating an index.

The LocoMail Master document

The next stage is to set up a LocoMail Master document which you will merge with your datafile to produce the finished index. In the box above you can see the Master document you'll need. Simply type this in.

Your Master document controls how your finished index will look, so the styling instructions are given here. In our example we included codes to make the Topics appear in bold text to make them easy to pick out, but you can put in something else if you want to.

Basically the program looks at each record in turn, compares the Topic and Sub-topic information with the same items in the previous record, then adds any new information and the page number to the appropriate place in the index. It also puts in commas and spaces where they are needed.

The loop will continue until the Topic item is empty which will be the case at the end of the datafile. The document produced by the merge will look like the example shown in the box, and your index is now ready to be printed out.

The index document

```
B:INDEXING/INDEX .DOC Editing text.
Layout 1 Pi12 LSI CR+0 LP6
f1=Actions f2=Layout f3=Style f4=Size
.....
(+Bold)Grant enlarger(-Bold), 26␣
(+Bold)Hot wax(-Bold), 16-17␣
(+Bold)Photography(-Bold)␣
  commissioned, 157, 21␣
  use of, in computer graphics, 183␣
  use of, in graphic design work, 46-7␣
(+Bold)Spare setting(-Bold), 30␣
(+Bold)Text(-Bold), 21, 44␣
  coloured, 26␣
  number of characters in, 44␣
  positioning, 29
```


Letters

Block size

I have discovered something curious in LocoScript 2. When I create a document which contains nothing at all, after finishing edit I find that the document is listed as a 2k document. I have never been able to create a document of 1k only. Why is my PCW greedier than most? Another problem I have found is that on some occasions when I am starting up my machine, it thinks it is an 8256 when it is really a 8512, and when the Disc Manager Screen appears, it informs me that my Drive B isn't fitted. What is happening?

Rev IP, Dublin

In answer to your first question, the size of a LocoScript file depends on the block size.

A block is the minimum amount of information that a PCW can read or write to disc and this varies according to the disc format. For 180k discs the block size is 1k; on 720k and the RAM disc, it is 2k. If you were to copy your empty document from Drive B or Drive M to a disc in Drive A, the size would change from 2k to 1k.

There are two reasons why your PCW might 'think' that it is a 8256. Either it can only 'see' 256k of memory, or it is only detecting one drive, which seems to be the problem in your case. This is usually caused by not removing the disc from Drive B after ejecting it. The PCW becomes confused and it doesn't detect Drive B when booting up. The solution is to insert a disc fully into the drive and then remove it again. Reboot the PCW and the problem should disappear.

If your PCW still thinks it is an 8256, then it is possible that you have a memory fault. This could be due to damaged chips or a loose connection, or by forgetting to re-set the option switches when fitting a memory upgrade. If you can't find the problem yourself you should consult a hardware specialist to find out exactly what is wrong.

Using different margins

We are printing out a book on our PCW8512 built-in printer, and we want to make the left hand margin of the even page the same as the right margin of the odd page and vice versa. Is it possible to do this in one print run?

Mr CD, Cardiff

Scale Pitch

I have a PCW9512, and almost always work in 12 characters per inch or less, rarely the default setting of 10 cpi.

Problems arise when doing complicated tabulation, because the screen pitch scale is 10 characters per inch. I understand the principle of setting up my tabs according to 10 cpi, but for detailed tabulation this leads to problems.

Apart from f8 and ticking Rulers, which seems to make no difference, is there a way to change the scale pitch? I can find no help in the manual that came with the machine.

Mrs VH, Gravesend

The pitch the ruler works in – the Scale pitch – is defined by the current Layout. You can change the Scale pitch of the current Layout by selecting the f2 option to change the layout, then going into the f8 Options menu. From this menu you select a Scale pitch of 12 by putting a tick next to it. Once you have done this and returned to your document the Scale pitch will be 12 to match your text. Finally you should re-set your margins to match the new Scale pitch.

You can ensure that future documents always have the same Scale pitch by setting up a template. If you set up all the Stock Layouts you use with a Scale pitch of 12, you won't have to worry about changing it in future and your documents will be shown on the screen as you want them.

Scale pitch was dealt with in more detail in an article in Issue 3.

Note: if your document uses more than one Layout, you will have to change all the Layouts individually. It is especially important to remember to re-set the Header/Footer Layout so it is the same as the main part of your document.

We're afraid that the answer to your question is no. You could achieve this effect by printing each page individually, or you could print out your documents twice: first setting the left offset so it is correct for the even pages, printing out all the documents and discarding the odd pages, then setting the offset so it's correct for the odd pages, printing again and discarding the even pages.

Letters

LocoFile diary

I received a copy of the ready prepared LocoFile Diary disc for my 9512 but I must appeal to you for help. The problem obviously is that it runs on CP/M which I only use to run a piece of accounting software. I have however tried, but got no further than managing to format a disc under DISCKIT but when I then tried to use the 8000COPY facility the message on the screen said 'Disc not suitable for drive: 180k' or words to that effect.

Was it not possible to produce a LocoScript version of this disc? I cannot get to grips with CP/M and despite the statement in the 9512 manual that the operation of this program is self-explanatory, I am finding it dreadfully difficult!

Mr WL, Kildary

The LocoFile diary does not work with CP/M: it works with LocoScript 2 and LocoFile. The only reason you need to use CP/M at all is to make a copy of the disc to work from, so there's no risk of damaging the Master disc. As the disc we supply is an 180k disc, you need a way of transferring the files to a 720k disc for use on a PCW9512. This is the function of the 8000COPY utility under CP/M and this is the reason we tell you to use CP/M.

However, if you are having problems using CP/M, then we suggest that you copy the files you need in another way. Load LocoScript 2 onto your PCW and then copy the files from the Diary disc onto Drive M. Format a blank disc in Drive A and copy the Diary files to this disc from Drive M. This will give you a 720k Diary disc which you should now be able to use without any problems.

Editing ASCII files

We wish to transfer files from our communications package (which is a Sage Chitchat Combo) to LocoScript for editing and storage. According to Sage the files are already in ASCII format but we can't get LocoScript to accept them. When trying to edit the document we get the response 'Not a LocoScript Document'. What are we doing wrong?

Mr RG, Hexham

You are having problems because you are trying to edit the ASCII files directly, which isn't possible. To use an ASCII file, you have to insert it into a LocoScript document.

Updating the dictionary

I have a PCW9512 and generally I'm very happy with it. I use a number of special terms and words in my documents which are stored in my User dictionary. However I would like to change some of these words, but it seems that LocoSpell will not let me. Can you help?

Mr TC, Liverpool

Updating your LocoScript User dictionary is very straightforward. All you have to do is create a document, then press **F7** to bring the 'Spell' menu up on the screen. At the bottom of this menu there is an option to Update the user dictionary: select this option with the cursor and press **ENTER**. LocoSpell's Dictionary menu appears listing the words in your current User dictionary. Move the cursor to the word you want to change and press **□**. This removes the word from the list, but it appears at the top of the menu so you can change it if you wish. Once you have done this, press **□** and the altered word will be inserted into the dictionary. If you want to remove the word altogether all you have to do is cursor to the word and press **□**.

When you have completed all the alterations you wanted to make, press **EXIT** and a menu will appear with the option Update the user dictionary. Select this and press **ENTER**. A new version of your dictionary is then saved to disc with the words you have changed.

Do this as follows. First create a new LocoScript document in the normal way. Then go into the **F1** Actions menu, move the cursor to the 'Insert text' option and press **ENTER**. You will now be returned to the Disc Manager Screen. Select your ASCII file with the File cursor and press **ENTER** twice. The contents of the ASCII file will be inserted into the new LocoScript document.

You'll now be able to edit your document with LocoScript. Once you have finished the edit, remember to save the document to disc so you'll be able to use it again.

Letters

Changing a datafile

I have a LocoFile datafile and I want to change the item for Volume number to year (each volume equals one specific year). The only way I could see to do this was to create a LocoMail datafile and copy all the LocoFile data to it, with a conditional instruction to change the Volume numbers into Years. But when I came to insert the data into a new datafile I found that LocoFile appears to be ignoring all the items which have nothing in them and is putting in the data for the first filled item it comes to. What is going wrong? I also get confused about quote marks in conditional instructions. The illustrations in the LocoMail handbook show no quotes around numbers, but when I entered my instructions for the purpose mentioned above, I found that #VOLUME=94: <:YEAR=1935:> didn't work unless I put quotes around the 94.

Mr NL, Littlehampton

Your initial problem lies in the LocoMail datafile you prepared from the original LocoFile datafile. From the record you enclosed we can see that you were using carriage returns to separate each item from the next one. However carriage returns before the first filled item are ignored by LocoMail, and this is the reason why your data was inserted into the wrong items in your new datafile. To avoid this happening we suggest using the § character as a separator instead of a carriage return: your records will then be inserted correctly.

We think you are having problems with your conditional instruction because some of the VOLUME items are blank. If an item is empty, in this case VOLUME, it is treated as a string, not a number. So the LocoMail instruction would be trying to compare a number (94) with a string, which is not possible and results in the Type mismatch error message appearing. But by placing quotation marks around 94 you change the number into a string, the comparison becomes a string comparison and no error occurs.

Footnotes tip

I suggest a refinement to your footnote article. Before the footnote text, put a (+RV) code to reverse the text on screen, then put a (-RV) code as the final action. This makes it so much easier to find the footnote when you want to paste it to the bottom of the page at the final edit. I find the

Page numbers

I am having trouble numbering my documents. As you can see from the enclosed screen dump I have instructed the Document Set-up correctly to have (+) Last Page Number in the header. The Printing program knows there are only 10 pages as you can see. However, although the machine can count "this page" correctly, it insists on adding a 6 at the end of the LPageNo, as here 16 even though as you can see, 10 is the last page. I have to insert the number 10 manually on the Document Set-up Header. Any suggestions?

Mr PE, Chesterfield

Having inspected your document it would appear that you have set the Total Page Number to 16 which means you will always get 16 from the (LPageNo) code in the Header, no matter how many pages you have in your documents.

The Total Page Number is set in Document Set-up. If you go into the f5 Page menu you are given the option Page Numbers. When you select this option you are shown a menu which allows you to set the numbers for the First Page and the Total Pages. The normal setting is First Page 1, while for Total Pages the space is filled with a series of question marks. If these stay as question marks, LocoScript counts the pages of the document and uses the total as the last page number. However if you enter a number in this space, that number will always be used as the last page number by LocoScript. To remove this number you should select it with the cursor then press ☐. This will cancel the number and put the question marks back.

For more details on how to put page numbers in your documents you should consult Session 16 (Session 17 for 9512 owners) of the LocoScript 2 Tutorial.

reverse feature very useful for other things as well.

Ms WL, Radlett

Thank you very much for your suggestion. You could also put the various codes you need for the beginning and end of your footnotes into phrases, so you can just paste them in.

PostScript

In Issue 12 we asked you to write in and tell us about any interesting uses for our software. Among those who replied was Mr Ron Phelps who told us about his retirement hobby – using LocoScript and LocoFile on his PCW9512 to help him keep and access his family history records.

Mr Phelps uses a wide variety of sources. Extracts from Parish Registers are usually the most useful source of information about a family but there are also various 'Indexes' such as the International Genealogical Index which lists the Baptisms and Marriages of a particular county in alphabetical order.

Between 1841 and 1881 a Census was taken every ten years, and this can provide a more detailed picture of a particular family, where they lived and what they did. Old documents such as birth certificates, wills and even tombstones all help to piece together the often complicated structure of a family.

Because a lot of very different information is involved, careful organisation is necessary. This is especially true when trying to work out more complicated trees involving all branches of a family rather than just the direct line – this means an awful lot of people! So Mr Phelps uses LocoScript with LocoFile to keep everything in order.

Using LocoScript he types all the notes he has made from the various sources into lists. Each list is given a special reference number. A datafile is then built up with all the information known about each person in individual records.

This record includes the person's name, the name of their spouse, their dates of birth, marriage and death and the names and dates of their children. It can also include

the occupation of the person and a brief summary of any other information known about them from the notes, with the relevant reference number so it's easy to find the right LocoScript document.

If exact dates aren't known, it is sometimes possible to make an estimate from other information. For example if the age at death is known, the date of birth can be worked out. If the real dates aren't known, a couple are assumed to have married at twenty and that the birth of their first child occurred in the year after their marriage. This keeps the records consistent and the real dates can be easily inserted if and when new evidence is discovered.

Using the indexes in LocoFile makes it easy to sort through the datafile to find the details of any person and their links with other individuals. For example a Name and Year of Birth index lets Mr Phelps search the datafile to check if a particular person has a record in the datafile, similarly looking for Year of Birth and Birthplace may help him to find links between people not yet sorted into family groups. In this way the family tree can be gradually built up.

Computers are being increasingly used in this area and Mr Phelps would be delighted to hear from anyone else using LocoFile, or answer any queries about his own method. He also plans to develop a LocoMail program which would let him extract the relevant details from the LocoFile datafiles into print outs from which he can compile a family tree. He already uses LocoScript to print family trees onto A3 paper, using the vertical line character for the 'drop-lines'.

Anyone wishing to contact Mr Phelps should write to him at Lyndley Croft, Bridge Road, Cranleigh, Surrey, GU6 7HH.